

OHIO AGRICULTURAL EXPERIMENT STATION
Northwestern Substation, Hoytville, Ohio

Department of Horticulture Mimeograph Series No. 201
January 30, 1960

SWEET CORN VARIETY TRIALS - 1959
Hoytville, Ohio

Walter N. Brown*

OHIO AGRICULTURAL EXP. STATION

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LIBRARY

In the 1959 sweet corn variety trials at Hoytville, 48 varieties were evaluated in single row plots replicated four times. Each plot consisted of twenty-one hills spaced eighteen inches in the row with thirty-six inches between rows. Four kernels per hill were planted by hand jabber on June 1. Stand counts were made at the two-three leaf stage to determine germination and later seedlings were thinned to two plants per hill permitting a maximum stand of 19,360 plants per acre. Fertilizer at the rate of 1000 lbs/A of 5-10-10 was drilled and disced in prior to planting after plowing down approximately 5 tons of manure with 2-year alfalfa sod. One side dressing of 100 lbs/A of ammonium nitrate was applied with cultivator attachment on June 29. Plants were not sprayed for control of flea beetle, corn borer, or corn ear worm. First harvest was made on August 5 and the last on August 26.

For the yield records only marketable size ears were included, however, some ears damaged by ear worm were included, since it was assumed that insects could have been controlled by the use of suitable pesticide treatments.

The symbols and rating system used are as follows:

Average Depth of Kernel: Average length of 3 kernels from center section of 3 ears selected at random from each plot.
Color of Kernel: LY = light yellow, MY = medium yellow, DY = dark yellow; B = bright, I = intermediate, D = dull.
Ease of Snapping: 1 - very difficult to 5 - easily snapped.
Shanks: 1 - long, over 6 inches to 5 - short 1 inch or less.
Flag Number: 1 - none to 5 - over eight.
Flag Length: 1 - less than 2 inches to 5 - over eight inches.
Tip Cover: 1 - exposed to 5 - long, extending 3 inches or more.
Silk Color: 1 - dark brown to 5 - clear or white.
Husk Color: 1 - light green and dull to 5 - dark glossy green.
Husk Tightness: 1 - loose to 5 - tight.
General Uniformity: 1 - poor to 5 - excellent.

SOURCE OF SEED

<u>Code</u>	<u>Source</u>
A ₂	Asgrow Seed Co., Inc., 272 George St., New Haven 2, Conn.
B ₁	W. Atlee Burpee & Co., Huntington Park Ave. @ 18th St., Phila. 32, Pa.
C ₁	Corneli Seed Co., 101 Chouteau Ave., St. Louis 2, Mo.
F ₁	Ferry-Morse Seed Co., P.O. Box 778, Detroit 31, Mich.
H ₁	Joseph Harris Co., McCreton Farm, Rochester 11, N.Y.
L ₁	Leatherman Seed Co., 501 McKinley Ave., N.W., Canton 2, Ohio
M ₁	Michael-Leonard Co., 333-355 West 35th St., Chicago 16, Ill.
R ₁	Robson Quality Seeds, Inc., Hall, N.Y.
R ₂	Rogers Brothers Seed Co., P.O. Box 30, Idaho Falls, Idaho
W ₁	F. H. Woodruff & Sons (Now incorporated with Asgrow Seed Co.)

GENERAL COMMENTS

The weather during the growing season was extremely dry and warm. On July 17 the corn was wilting with the leaves badly curled. The hot and dry conditions resulted in irregular emergence and variation in early growth yet this was not manifested in uneven maturities within a variety. The weather conditions did cause an acceleration of and the bunching of maturities. Yields were generally below average.

¹Department of Horticulture, Ohio Agricultural Experiment Station, Columbus 10, Ohio.

TABLE 1
SWEET CORN VARIETY TRIALS - HOYTVILLE, OHIO 1959

Row Number	VARIETY and Lot Number		Source	Days to First Harvest	Marketable Yield/Acre		Average Weight of Ears Unhusked	Average Length of Ears Husked	Average Diameter of Ears Husked	Percentage of Ears Having Given Number of Rows of Kernels								Average Depth of Kernel	Kernel Color	Ear Smut	Ear Worm	East of Snapping(1-5)	Shanks (1-5)	Flag Number (1-5)	Flag Length (1-5)	Tip Cover (1-5)	Silk Color (1-5)	Husk Color (1-5)	Husk Tightness (1-5)	General Uniformity(1-5)
					Dozens of Ears	Weight (Tons)				8	10	12	14	16	18	20	22													
				Doz.	Tons	Lbs.	In.	In.	%	%	%	%	%	%	%	mm		%	%											
1	North Star	1809F	H ₁	63	1230	4.8	.65	7.3	1.73	10	20	70	-	-	-	-	7.9	LYB	0	0	3	4	3	3	4	3	4	2	4	
2	Gold Crest	28430	F ₁	64	1507	4.9	.54	7.5	1.63	-	5	70	20	5	-	-	8.0	MYB	0	0	4	4	3	3	3	5	3	3	5	
3	Golden Beauty	1832F	H ₁	64	1185	4.2	.59	7.5	1.72	-	5	80	15	-	-	-	8.3	MYB	0	0	3	4	3	3	3	4	3	4	4	
4	Hybrid 101	86054	F ₁	67	1338	4.0	.49	7.7	1.53	-	5	80	10	5	-	-	7.3	MYB	0	0	3	4	3	3	3	3	4	4	4	
7	Seneca Sunbeam	1019LF	R ₁	67	1284	4.7	.61	7.2	1.63	-	10	50	30	10	-	-	7.7	LYB	0	0	3	4	3	3	3	3	4	3	4	
9	Garden Gold	28983	F ₁	67	1369	4.4	.53	7.4	1.57	-	-	85	15	-	-	-	7.2	LYB	0	0	3	4	3	3	3	3	3	3	4	
13	Morning Sun	1-13585	L ₁	67	1132	4.5	.67	7.6	1.70	-	5	55	35	5	-	-	8.4	LYB	0	0	2	4	3	3	3	2	4	3	5	
40	Earligold	1-185	L ₁	69	1325	4.8	.61	7.7	1.75	-	5	85	10	-	-	-	8.7	DYB	0	0	3	4	3	3	3	4	4	4	4	
5	Carmelcross	1823-F	H ₁	70	1358	5.1	.62	7.7	1.70	-	-	60	40	10	-	-	8.3	MYB	0	0	3	4	3	3	4	4	3	4	5	
6	Northernbelle	182YLF	H ₁	70	1320	5.0	.63	7.7	1.63	-	-	5	30	45	15	-	7.3	LYB	0	0	3	4	3	3	3	3	4	4	5	
8	Golden Emblem	21182	F ₁	70	1403	4.7	.56	7.7	1.63	-	-	60	40	-	-	-	8.0	LYB	0	0	3	4	4	3	4	3	3	4	4	
12	Golden Hybrid G101	ST 88038	R ₂	70	1483	5.3	.60	7.5	1.75	-	-	70	25	5	-	-	8.4	MYB	0	0	4	4	3	3	3	4	4	3	5	
14	Treasure Gold	23451	F ₁	70	1126	4.7	.69	7.6	1.68	-	-	35	45	15	5	-	8.3	LYB	0	0	3	4	3	3	4	4	4	4	5	
10	Earlychief	20118	M ₁	71	1301	4.7	.60	8.1	1.55	-	-	35	55	5	-	-	7.9	LYB	0	0	2	4	3	3	3	4	3	3	5	
15	F-M Cross	28421	F ₁	71	857	3.3	.63	7.5	1.57	-	-	15	35	40	10	-	7.4	LYB	0	0	3	4	3	3	4	4	4	3	3	
18	Mellogold WS	ST.88039	R ₂	71	1253	5.1	.68	8.6	1.70	-	-	15	65	20	-	-	8.1	MYB	0	0	3	4	3	3	3	4	3	4	5	

TABLE 1 (con't.)
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Row Number	VARIETY and Lot Number			Source	Days to First Harvest	Marketable Yield/Acre		Average Weight of Ears Unhusked	Average Length of Ears Husked	Average Diameter of Ears Husked	Percentage of Ears Having Given Number of Rows of Kernels								Average Depth of Kernel	Kernel Color	Ear Smut	Ear Worm	Ease of Snapping (1-5)	Shanks (1-5)	Flag Number (1-5)	Flag Length (1-5)	Tip Cover (1-5)	Silk Color (1-5)	Husk Color (1-5)	Husk Tightness (1-5)	General Uniformity(1-5)
						Dozens of Ears	Weight (Tons)																								
											8	10	12	14	16	18	20	22													
				Doz.	Tons	Lbs.	In.	In.	%	%	%	%	%	%	%	mm		%	%												
19	Sugar King	1-13585	L ₁	72	1485	5.6	.62	8.1	1.67	-	-	10	55	35	-	-	-	8.4	LYB	0	0	4	3	3	3	2	3	4	4	4	
20	Asgrow Golden 22	1-185	L ₁	72	1404	5.5	.65	7.7	1.74	-	-	45	35	20	-	-	-	8.0	MYB	0	0	5	4	3	3	2	4	4	3	4	
31	Barbecue	1818T	H ₁	72	1306	4.3	.55	8.0	1.65	-	-	90	10	-	-	-	-	8.0	DYB	1.9	0	4	4	3	3	3	4	4	4	4	
32	Gold Cup	1812T	H ₁	72	1535	5.4	.58	7.6	1.55	-	-	-	25	55	20	-	-	8.0	LYB	0	0	3	4	3	3	3	3	4	4	4	
11	Early Fine	20098	M ₁	74	1234	3.4	.46	7.6	1.37	-	-	40	55	5	-	-	-	6.4	LYB	0	0	4	4	3	3	2	4	3	3	4	
17	Foremost Y-2	23488	F ₁	74	1183	4.1	.58	7.9	1.62	-	-	5	35	60	-	-	-	7.0	LYB	1	0	3	4	3	3	2	4	3	4	4	
21	Hybrid 102A	28415	F ₁	74	1232	5.1	.69	7.5	2.35	-	-	-	-	25	35	35	5	8.8	LYB	0	0	3	4	3	2	2	4	4	4	4	
23	Evertender C	32683	M ₁	74	1348	5.7	.70	8.0	1.72	-	-	-	15	45	30	10	-	7.8	LYB	0	0	4	3	4	4	4	4	4	4	4	
16	Asgrow Golden 25	1-185	L ₁	74	1444	5.6	.65	8.6	1.63	-	-	5	55	35	5	-	-	8.1	LYB	0	0	3	4	3	3	3	4	4	3	5	
29	Florigold	88046	F ₁	78	1008	3.3	.55	7.8	1.70	-	-	20	65	15	-	-	-	9.0	MYB	0.9	7.6	3	4	3	3	3	4	4	3	4	
30	Sixtypak	94690-130	A ₁	78	1255	4.7	.63	8.7	1.50	-	-	30	55	15	-	-	-	6.7	LYB	0	16.9	3	3	4	4	2	4	4	4	4	
42	Superchief	--	C ₁	78	1198	4.8	.67	7.9	1.75	-	-	-	10	55	35	-	-	8.0	MYB	0	0	2	3	3	2	2	2	3	3	4	
26	Seneca Wampum	1068LF	R ₁	79	1364	5.8	.71	8.2	1.80	-	-	25	50	25	-	-	-	8.7	MYB	0.7	5.0	3	3	3	3	3	3	3	5	5	
27	Wonderful	1824MF	H ₁	79	1207	4.1	.56	8.1	1.55	-	-	25	65	10	-	-	-	7.7	LYB	0	9.6	3	4	3	3	3	3	3	4	4	
28	Golden Cross Bantam	1820F	H ₁	79	1063	3.5	.55	7.6	1.60	-	-	40	50	10	-	-	-	7.7	MYB	0	3.6	3	4	3	3	3	3	4	3	4	
33	Honeycross	6263	B ₁	79	1427	5.2	.61	8.8	1.75	--	-	60	40	-	-	-	-	9.3	MYB	0	4.7	3	4	3	4	2	4	4	3	4	

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				Dozens of Ears	Weight (Tons)				8	10	12	14	16	18	20	22													
						Doz.	Tons	Lbs.									In.		In.	%									%
22	Surecrop 1811T	H ₁	79	1455	6.0	.68	7.5	1.65	-	-	-	-	55	45	-	-	8.7	LYB	0	0	3	4	4	3	4	3	4	4	4
34	Surecross 5143	B ₁	79	1264	4.7	.62	8.7	1.75	-	5	25	50	20	-	-	-	9.7	DYB	0	0	4	4	3	4	3	4	4	4	4
35	Asgrow Golden 60 1-185	L ₁	79	1351	6.4	.78	8.6	1.80	-	-	10	35	40	15	-	-	9.3	MYB	0	0	3	3	4	3	2	3	4	3	4
24	Seneca Chief 13396	R ₁	80	1431	4.9	.57	8.3	1.55	-	-	55	40	5	-	-	-	8.7	LYB	0	0	3	4	3	3	2	3	3	4	4
25	Seneca Warpath 1467LF	R ₁	80	1334	5.9	.74	7.8	1.65	-	-	10	40	40	10	-	-	8.0	MYB	0	0	4	3	3	3	4	4	3	4	4
41	Iochief 1822LT	H ₁	80	1152	4.7	.67	8.3	1.75	-	-	-	-	70	30	-	-	10.0	DYB	0	0	2	3	4	3	2	2	4	3	4
37	Victory Golden 45992F	W ₁	81	1193	5.2	.73	7.8	1.70	-	-	15	25	60	-	-	-	8.7	MYB	0	0	3	3	4	5	3	4	4	3	4
38	Deep Gold 50831-R	W ₁	81	1172	4.4	.63	7.7	1.85	-	-	-	-	25	40	35	-	10.0	DYB	0	0	3	4	3	2	3	5	3	3	5
39	Golden Hybrid 583 50833-F	W ₁	81	1154	4.2	.61	7.0	1.80	-	-	-	-	10	35	45	10	9.7	LYB	0	0	3	4	3	3	3	4	3	5	4
43	Dominator ST 88045	R ₂	81	1258	5.1	.67	8.4	1.85	-	-	55	45	-	-	-	-	10.0	DYB	0	0	3	4	3	3	3	4	3	3	4
47	Deligold 30681	M ₁	81	1354	5.4	.67	8.5	1.80	-	-	5	45	45	5	-	-	11.3	DYB	0	5	3	4	4	4	2	5	3	3	4
36	Golden Security 49261R	W ₁	83	1508	6.6	.73	7.5	1.75	-	-	5	15	45	35	-	-	8.0	MYB	0	0	4	3	4	4	4	2	4	4	4
44	Golden Sensation 35782	M ₁	83	1434	5.5	.63	7.7	1.80	-	-	15	35	50	-	-	-	9.7	DYB	0	0	3	4	3	3	3	4	3	4	4
45	Longchief 20378	M ₁	83	1050	5.6	.89	8.3	1.95	-	-	-	5	15	55	25	-	12.0	MYB	0	0	2	3	4	3	3	4	3	4	4
46	Tendermost C 20548	M ₁	83	1298	5.7	.73	7.6	1.85	-	-	15	35	45	5	-	-	10.7	DYB	0	0	3	4	3	3	2	4	4	4	3
48	Aristogold Bantam 35476	M ₁	84	1253	5.7	.75	8.5	1.80	-	-	25	35	60	-	-	-	8.3	MYB	0	0	3	4	3	3	3	1	4	3	5
	Evergreen																												